CANHAM et al Serial No. 10/051,059 June 12, 2003

IN THE CLAIMS

Please amend the claims as follows:

The following claim set replaces all prior versions, and listings, of claims in the application:

1. 24. (Currently Amended) A method of fabricating an electroluminescent device including the steps of:

- a) implanting a surface region of a silicon wafer, doped with a donor impurity to render the wafer n-type, with an acceptor impurity such that the surface region has a volume concentration of the acceptor impurity which is greater than a volume concentration of the donor impurity;
- b) anodizing the wafer under illumination to produce a luminescent porous silicon region extending through the surface region; and
 - c) depositing an electrode on the porous silicon region;

wherein thea condition (i) is satisfied, wherein condition (i) requires that at least a part of the region has an acceptor impurity volume concentration comparable with the solid solubility limit of the acceptor impurity in silicon-is satisfied;

and/orand wherein one or moreat least one of the following conditions are satisfied:

- (ii) the surface region has a sheet resistivity greater than $100 \Omega \text{ m}^4 \text{per}$ square immediately prior to the anodizing step;
- (iii) less than 1% of the acceptor impurity is electrically active prior to the anodizing step;
- (iv) the silicon wafer does not receive an anneal between steps (a) and (b); and
- (v) the anodization step (b) causes surface doping of silicon quantum wires within the porous silicon region, rendering the surface doped quantum wires p-type.

25. (Currently Amended) A method of fabricating an electroluminescent device according to claim 24, wherein, when one or moreat least one of conditions (ii) to (v) apply, and the anodization step (b) comprises the step of anodizing the wafer in aqueous hydrofluoric acid in such a manner that microporous porous silicon is formed.

26-31. (Withdrawn from consideration)